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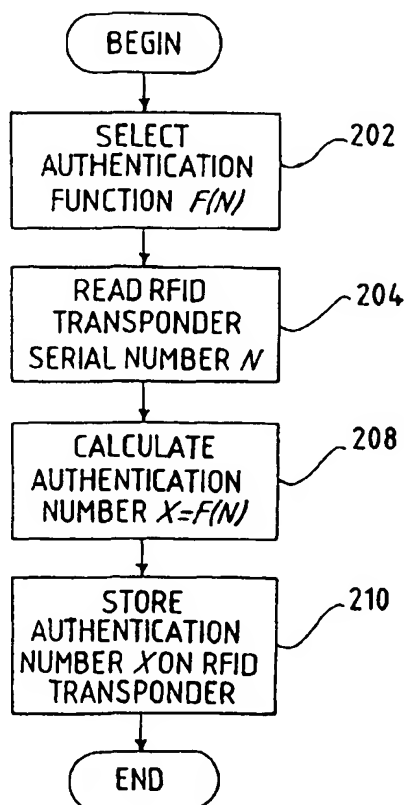
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(54) Title: METHOD AND APPARATUS FOR ARTICLE AUTHENTICATION



(57) Abstract: An authentication method for authenticating an article (Fig. 2a, 202, 204, 208, 210) in a device includes the steps of a) reading an identification number stored on the article, b) reading an authentication number stored on the article, c) determining an input number based at least in part on the identification number, d) applying an authentication function to the input number to calculate an output number, e) determining that the article is authentic only if the authentication number corresponds to the output number, and f) permitting use of the article in the device if the article is authentic, and disabling use of the article in the device if the article is not authentic.



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INTERNATIONAL SEARCH REPORT

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PCT/US02/26617

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04L 9/00; G06F 15/16

US CL : 713/150; 705/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 713/150; 705/50

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
ACM Portal; IEEEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
ACM Portal; IEEE**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,754,656 A(NISHIOKA et al) 19 May 1998 (19.05.1998), see entire document ...	1-66
A	US 6,049,610 A(CRANDALL) 11 April 2000 (11.04.2000), see entire document ...	1-66
A	US 5,805,703 A(CRANDALL) 08 September 1998 (08.09.1998), see entire document ...	1-66
A	US 5,995,626 A(NISHIOKA et al) 30 November 1999 (30.11.1999), see entire document ...	1-66
A	US 5,724,425 A(CHANG et al) 03 March 1998 (03.03.1998), see entire document ...	1-66
A	US 6,099,178 A(SPURR et al) 08 August 2000 (08.08.2000), see entire document ...	1-66
A	Using smart cards to authenticate passwords, Chang, C.-C.; Hwang, R.-J.; Buchrer, D.; Security Technology, 1993. Security Technology, Proceedings. Institute of Electrical and Electronics Engineers 1993 International Carnahan Conference on , 13-15 Oct 1993 Page(s): 154 -156	1-66

☒ Further documents are listed in the continuation of Box C.

See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	An ID-based cryptographic technique for IFF, Tu, K.; Military Communications Conference, 1995. MILCOM '95, Conference Record, IEEE, Volume: 3, 8 Nov 1995 Page(s): 1258 -1262 vol.3	1-66
A	Rajiv Gupta; Scott A. Smolka; Shaji Bhaskar; "On Randomization in Sequential and Distributed Algorithm" ; ACM Computing Surveys (CSUR), Volumn 26, Issue 1, (March 1994) Pages: 7-86	1-66